Experiment Number: 92003-02 **Test Type:** CHRONIC

Species/Strain: Mouse/B6C3F1

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014 Time Report Requested: 22:00:14

First Dose M/F: NA / NA

Lab: NIEHS

C Number: C92003

Lock Date: 04/27/1994

Cage Range: All

Date Range: All

Reasons For Removal:

Removal Date Range: All

Treatment Groups: All

Study Gender: Both

PWG Approval Date NONE

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014 Time Report Requested: 22:00:14

First Dose M/F: NA / NA

B6C3F1 Mouse MALE	7M	9M
Disposition Summary		
Animals Initially In Study	70	70
Early Deaths		
Moribund Sacrifice	1	
Natural Death	15	9
Survivors		
Accidentally Killed		1
Moribund Sacrifice		1
Natural Death	16	9
Terminal Sacrifice	38	50
Animals Examined Microscopically	60	65
ALIMENTARY SYSTEM		
Intestine Large, Cecum	(1)	(0)
Intestine Small, Jejunum	(1)	(0)
Lymphoma Malignant	1 (100%)	
Liver	(57)	(62)
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site		1 (2%)
Hemangiosarcoma	3 (5%)	2 (3%)
Hepatoblastoma	1 (2%)	
Hepatocellular Adenoma	10 (18%)	19 (31%)
Hepatocellular Adenoma, Multiple	1 (2%)	5 (8%)
Hepatocellular Carcinoma	17 (30%)	4 (6%)
Hepatocellular Carcinoma, Multiple	1 (2%)	1 (2%)
Mesentery	(1)	(3)
Pancreas	(48)	(59)
Acinus, Carcinoma		1 (2%)
Stomach, Forestomach	(1)	(0)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study **CAS Number:** DIET90

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

Lab: NIEHS

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:14

First Dose M/F: NA / NA

B6C3F1 Mouse MALE	7M	9М
Stomach, Glandular	(1)	(0)
CARDIOVASCULAR SYSTEM		
Heart	(57)	(64)
Carcinoma, Metastatic, Pancreas		1 (2%)
Epicardium, Mesothelioma Malignant	1 (2%)	
ENDOCRINE SYSTEM		
Adrenal Cortex	(45)	(46)
Adenoma	1 (2%)	
Capsule, Adenoma		1 (2%)
Capsule, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site		1 (2%)
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site		1 (2%)
Adrenal Medulla	(39)	(43)
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site		1 (2%)
Islets, Pancreatic	(51)	(60)
Adenoma, Multiple	1 (2%)	
Pituitary Gland	(42)	(48)
Thyroid Gland	(49)	(56)
Follicular Cel, Adenoma		1 (2%)
GENERAL BODY SYSTEM		
Tissue NOS	(1)	(0)
Carcinoma	1 (100%)	
GENITAL SYSTEM		
Preputial Gland	(1)	(0)
Seminal Vesicle	(39)	(26)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014 Time Report Requested: 22:00:14

First Dose M/F: NA / NA

B6C3F1 Mouse MALE	7M	9M
Testes	(57)	(62)
HEMATOPOIETIC SYSTEM		
Lymph Node, Mandibular	(44)	(56)
Lymphoma Malignant		1 (2%)
Mast Cell Tumor Malignant, Metastatic, Uncertain Primary Site	1 (2%)	
Lymph Node, Mesenteric	(45)	(53)
Lymphoma Malignant	2 (4%)	2 (4%)
Spleen	(49)	(55)
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site		1 (2%)
Hemangiosarcoma		3 (5%)
Lymphoma Malignant	1 (2%)	1 (2%)
Thymus	(11)	(13)
NTEGUMENTARY SYSTEM		
Mammary Gland	(0)	(1)
Skin	(2)	(3)
Melanoma Malignant		1 (33%)
MUSCULOSKELETAL SYSTEM None		
NERVOUS SYSTEM		
Brain	(0)	(1)
RESPIRATORY SYSTEM		
Lung	(58)	(63)
Alveolar/Bronchiolar Adenoma	13 (22%)	13 (21%)
Alveolar/Bronchiolar Adenoma, Multiple	1 (2%)	5 (8%)
Alveolar/Bronchiolar Carcinoma	3 (5%)	6 (10%)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically

Test Type: CHRONIC

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:14

First Dose M/F: NA / NA

Lab: NIEHS

Test Compound: NTP 90 diet study

Species/Strain: Mouse/B6C3F1

CAS Number: DIET90

B6C3F1 Mouse MALE	7 M	9М
Carcinoma, Metastatic, Liver	1 (2%)	
Hepatocellular Carcinoma, Metastatic, Liver	3 (5%)	1 (2%)
Lymphoma Malignant		1 (2%)
Mesothelioma Malignant	1 (2%)	
Sarcoma, Multiple	1 (2%)	
Pleura	(1)	(0)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung	1 (100%)	
SPECIAL SENSES SYSTEM		
Eye	(0)	(1)
Harderian Gland	(0)	(3)
Adenoma		2 (67%)
Carcinoma		1 (33%)
Zymbal's Gland	(1)	(0)
JRINARY SYSTEM		
Kidney	(53)	(61)
Cortex, Renal Tubule, Carcinoma		1 (2%)
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site		1 (2%)
Urinary Bladder	(50)	(59)
SYSTEMIC LESIONS		
Multiple Organ	*(60)	*(65)
Lymphoma Malignant	2 (3%)	2 (3%)
Mesothelioma Malignant	1 (2%)	

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014 Time Report Requested: 22:00:14

First Dose M/F: NA / NA

Lab: NIEHS

B6C3F1 Mouse MALE	7M	9М
Tumor Summary for MALE		
Total Animals with Primary Neoplasms (b)	42	46
Total Primary Neoplasms	57	68
Total Animals with Benign Neoplasms	23	36
Total Benign Neoplasms	27	46
Total Animals with Malignant Neoplasms	25	18
Total Malignant Neoplasms	30	22
Total Animals with Metastatic Neoplasms	6	3
Total Metastatic Neoplasms	6	8
Total Animals with Malignant Neoplasms Uncertain Primary Site	1	1
Total Animals with Neoplasms Uncertain - Benign or Malignant		
Total Uncertain Neoplasms		

END OF MALE DATA

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically

Experiment Number: 92003-02 P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study

CAS Number: DIET90

B6C3F1 Mouse FEMALE	7F	9F
Disposition Summary		,
Animals Initially In Study	70	70
Early Deaths		
Natural Death	14	7
Survivors		
Moribund Sacrifice	2	
Natural Death	5	9
Terminal Sacrifice	49	54
Animals Examined Microscopically	62	67
ALIMENTARY SYSTEM		
Intestine Small, Jejunum	(1)	(0)
Lymphoma Malignant	1 (100%)	
Liver	(60)	(62)
Carcinoma, Metastatic, Islets, Pancreatic		1 (2%)
Hemangiosarcoma	2 (3%)	2 (3%)
Hemangiosarcoma, Metastatic, Spleen		1 (2%)
Hepatocellular Adenoma	15 (25%)	11 (18%)
Hepatocellular Adenoma, Multiple	12 (20%)	6 (10%)
Hepatocellular Carcinoma	8 (13%)	7 (11%)
Hepatocellular Carcinoma, Multiple		1 (2%)
Lymphoma Malignant		3 (5%)
Mesentery	(15)	(12)
Pancreas	(54)	(57)
CARDIOVASCULAR SYSTEM		
Heart	(62)	(64)

Ventricle, Carcinoma, Metastatic, Skin

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

Date Report Requested: 10/21/2014
Time Report Requested: 22:00:14

First Dose M/F: NA / NA

Lab: NIEHS

1 (2%)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014 Time Report Requested: 22:00:14

First Dose M/F: NA / NA

B6C3F1 Mouse FEMALE	7 F	9F
ENDOCRINE SYSTEM		
Adrenal Cortex	(52)	(52)
Carcinoma		1 (2%)
Adrenal Medulla	(45)	(45)
Pheochromocytoma Benign	1 (2%)	
Islets, Pancreatic	(53)	(58)
Adenoma	1 (2%)	1 (2%)
Carcinoma		1 (2%)
Pituitary Gland	(47)	(52)
Adenoma	4 (9%)	1 (2%)
Pars Distalis, Adenoma	4 (9%)	1 (2%)
Thyroid Gland	(54)	(60)
Bilateral, Follicular Cel, Adenoma		1 (2%)
Follicle, Adenoma	2 (4%)	
Follicular Cel, Adenoma		2 (3%)
GENERAL BODY SYSTEM		
Tissue NOS	(3)	(2)
Abdominal, Lymphoma Malignant	()	1 (50%)
Thoracic, Hemangiosarcoma	1 (33%)	, ,
Thoracic, Sarcoma	, ,	1 (50%)
GENITAL SYSTEM		
Ovary	(52)	(59)
Bilateral, Lymphoma Malignant	` '	1 (2%)
Cystadenoma	3 (6%)	7 (12%)
Uterus	(58)	(63)
Bilateral, Lymphoma Malignant	` '	1 (2%)
Carcinoma	1 (2%)	1 (2%)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study

CAS Number: DIET90

First Dose M/F: NA / NA Lab: NIEHS

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:14

B6C3F1 Mouse FEMALE	7F	9F
Leiomyoma	1 (2%)	
Vagina	(1)	(0)
HEMATOPOIETIC SYSTEM		
Lymph Node, Mandibular	(49)	(54)
Lymphoma Malignant	1 (2%)	2 (4%)
Lymph Node, Mesenteric	(43)	(51)
Lymphoma Malignant	2 (5%)	2 (4%)
Plasma Cell Tumor Malignant		1 (2%)
Spleen	(55)	(61)
Hemangiosarcoma	2 (4%)	1 (2%)
Lymphoma Malignant	1 (2%)	5 (8%)
Thymus	(20)	(25)
Lymphoma Malignant		1 (4%)
Thymoma Benign	,	1 (4%)
NTEGUMENTARY SYSTEM		
Mammary Gland	(0)	(1)
Carcinoma		1 (100%)
Skin	(4)	(7)
Pinna, Carcinoma		1 (14%)
Sarcoma	2 (50%)	2 (29%)
Sarcoma, Multiple		1 (14%)
Schwannoma Malignant	2 (50%)	

NERVOUS SYSTEM

None

None

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically

Test Type: CHRONIC

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study

Species/Strain: Mouse/B6C3F1 CAS Number: DIET90

Date Report Requested: 10/21/2014 Time Report Requested: 22:00:14

First Dose M/F: NA / NA

B6C3F1 Mouse FEMALE	7F	9F
RESPIRATORY SYSTEM		
Lung	(60)	(64)
Alveolar/Bronchiolar Adenoma	4 (7%)	5 (8%)
Alveolar/Bronchiolar Adenoma, Multiple		1 (2%)
Alveolar/Bronchiolar Carcinoma	1 (2%)	3 (5%)
Carcinoma, Metastatic, Skin		1 (2%)
Hepatocellular Carcinoma, Metastatic, Liver	3 (5%)	1 (2%)
Lymphoma Malignant		3 (5%)
Osteosarcoma, Metastatic, Uncertain Primary Site		1 (2%)
Sarcoma, Metastatic, Skin		1 (2%)
SPECIAL SENSES SYSTEM		
Eye	(1)	(0)
Harderian Gland	(1)	(4)
Adenoma	1 (100%)	4 (100%)
URINARY SYSTEM		
Kidney	(56)	(62)
Lymphoma Malignant		3 (5%)
Pelvis, Lymphoma Malignant	1 (2%)	
Sarcoma		1 (2%)
Urinary Bladder	(51)	(54)
Lymphoma Malignant		1 (2%)
SYSTEMIC LESIONS		
Multiple Organ	*(62)	*(67)
Lymphoma Malignant	2 (3%)	9 (13%)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014 Time Report Requested: 22:00:14

First Dose M/F: NA / NA

Lab: NIEHS

B6C3F1 Mouse FEMALE	7F	9F
Tumor Summary for FEMALE		
Total Animals with Primary Neoplasms (b)	45	52
Total Primary Neoplasms	69	75
Total Animals with Benign Neoplasms	34	32
Total Benign Neoplasms	48	41
Total Animals with Malignant Neoplasms	17	26
Total Malignant Neoplasms	21	34
Total Animals with Metastatic Neoplasms	3	6
Total Metastatic Neoplasms	3	7
Total Animals with Malignant Neoplasms Uncertain Primary Site		1
Total Animals with Neoplasms Uncertain - Benign or Malignant		
Total Uncertain Neoplasms		

** END OF REPORT **

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

^{*} Number of animals with any tissue examined microscopically